

## CLAIMS OF THE INVENTION

WE CLAIM:

1. An accessory and a wireless communication device configured to detect the type of accessory connected to the wireless communication device comprising:

an accessory comprising:

two or more outputs configured to connected to the wireless communication device and output one or more signals to the wireless communication device;

a signal source configured to connect to at least one of the two or more outputs;

an wireless communication device comprising:

two or more inputs configured to receive one or more signals from the accessory;

a processor configured to:

analyze the one or more signals on the two or more inputs to determine a type of accessory connected to the wireless communication device; and

initiate accessory interaction based on the analysis.

2. The accessory and wireless communication device of Claim 1, wherein the accessory further includes memory and wherein the processor is further configured to read data from the memory in the accessory.

3. The accessory and wireless communication device of Claim 1, wherein the accessory comprises a hands-free system.
4. The accessory and wireless communication device of Claim 1, wherein the one or more signals comprise DC voltage levels.
5. The accessory and wireless communication device of Claim 4, wherein the DC voltage levels comprise logic '1' values and logic '0' values.
6. The accessory and wireless communication device of Claim 1, wherein accessory interaction comprises executing software code to interface with the accessory.
7. The accessory and wireless communication device of Claim 1, wherein the wireless communication device comprises a cellular telephone.
8. The accessory and wireless communication device of Claim 1, wherein the accessory further includes a memory configured to store a control code, the memory accessible via the two or more outputs.
9. An accessory for use with a communication device comprising:  
two or more output terminals configured to connect to a communication device;

a power source connection configured to connect to a power source;

a signal generator configured to obtain power from the power source connection and provide a signal on at least one of the two or more output terminals, wherein the accessory is identified by which output terminals are provided a signal.

10. The accessory of Claim 9, wherein the power source connection is configured to connect to a 12 volt power supply.

11. The accessory of Claim 9, wherein the signal generator is a semiconductor device configured to generate a DC signal.

12. The accessory of Claim 6, further including a memory configured to store a control code, the memory accessible via the two or more output terminals.

13. A method for detecting a category of an accessory connected to a communication device:

providing a communication device with two or more inputs;  
monitoring the two or more inputs for a voltage;  
comparing the inputs having a voltage to predetermined patterns; and

determining, responsive to the comparing, the category of the accessory connected to a communication device.

14. The method of Claim 13, further including reading data from a memory located in the accessory and analyzing the data.
15. The method of Claim 13, further including providing an accessory with two or more outputs and connecting two or more outputs of the accessory to the two or more inputs of the communication device.
16. The method of Claim 14, wherein the data comprises control data and the method further includes reading at least a portion of the control data from the memory in the accessory.
17. The method of Claim 13, wherein one of the predetermined patterns comprise at least one input receiving a voltage and the remaining inputs receiving no voltage.
18. The method of Claim 13, wherein the accessory comprises a speaker phone system and the communication device comprises a wireless telephone.
19. The method of Claim 13, further comprising reading accessory data stored in a memory on the accessory and initiating an accessory interaction operation based on the comparing.
20. The method of Claim 19, wherein the accessory interaction comprises setting audio parameters.

21. The method of Claim 19, wherein the accessory interaction comprises executing software code.
22. A method for initiating operation of an interface of a communication device comprising:
- providing a communication device having two or more inputs;
  - monitoring the two or more inputs for a signal;
  - detecting a signal on one or more of the inputs;
  - processing the signal to determine a type of accessory connected to the communication device; and
  - initiating an accessory interaction operation based on the processing.
23. The method of Claim 22, wherein the signal comprises a DC signal.
24. The method of Claim 22, wherein processing comprise comparing the signal to data stored in memory.
25. The method of Claim 22, wherein processing comprises providing a signal to control logic, the control logic configured to determine an accessory type.

26. An apparatus for detecting a type of accessory connected to a communication device, the apparatus comprising:

means for receiving an electrical signal from an accessory;

means for detecting an electrical signal from the accessory;

means for analyzing an electrical signal from the accessory and controlling communication device operation based on the analyzing.

27. The apparatus of Claim 26, further including means for retrieving data from the accessory.

28. The apparatus of Claim 26, wherein the means for analyzing an electrical signal comprises means for determining which of two or more means for receiving is receiving an electrical signal.